

THE ERUPTION IN HIIAKA CRATER, ISLAND OF HAWAII

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Hiiaka* Crater, a minor pit crater in Hawaii Volcanoes National Park and named in honor of the sister of the Hawaiian Volcano Goddess Pele, showed activity at 6.45 A.M., August 22, 1968, the first time within the memory of man. Clouds of acrid fumes rose into the air to be carried by the trade wind in a southwesterly direction. Though the activity culminated in a 75-foot lava fountain, and a pool of lava 300 feet in circumference accumulated in the crater before draining away underground, the area became quiescent before noon of the same day.

On August 24 we drove along the Chain-of-Craters Road, turning into the side road leading to Ainahou Ranch. For a distance of about a mile along this road or up to one and a half miles leeward as the crow flies from Hiiaka Crater, we noted the following common plants affected by the fumes: Sadleria cyatheoides (endemic), Lycopodium cernuum var. crassifolium (native), Arundina bambusifolia (naturalized weed), Santalum paniculatum (endemic), Osteomeles anthyllidifolia (native), Dodonaea viscosa s.l. (native), Styphelia tameiameia (endemic), Vaccinium reticulatum (endemic), Euddleja asiatica (naturalized weed), Pluchea odorata (naturalized weed), and Raiiwardia ciliolata var. laxiflora (endemic). Their leaves showed signs of wilting and/or yellowing and often death. What impressed us was that the endemic Metrosideros, often incorrectly considered conspecific with the New Zealand M. collina, showed no damage from the fumes at all, apparently having developed an efficient immunity over the ages.

*Incorrectly spelled "Heake" on the United States Geological Survey map, edition of 1933.
